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ABSTRACT

Peer observation is discussed as an aid in instructional development, rather than a method for teacher evaluation. A team effort, consisting of from three to four peers who observe each other from four to seven times during the span of one term offers the greatest likelihood that instruction will be improved. Whether these groups are elective or assigned, disciplinary or interdisciplinary, is a matter of institutional preference and each combination offers unique advantages. Instructing faculty members in the terminology, philosophy, and methodologies of observing the teaching/learning process is crucial, and the orientation sessions require an introduction to the educational jargon used in observation. An orientation, or pre-observation conference can allow the observee to provide the team with his objectives for the lesson they are to observe and the criteria for the observation. Observation in the classroom should be unobtrusive. In a post-observation conference the observee analyzes the achievement of the lesson objectives, and the team provides feedback based on their data sheets. Based on the discussion, the observee can plan to increase some behaviors, such as questioning, or maintain the use of techniques which were successful. Evaluation of the effectiveness of a peer observation program is discussed. (SW)

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USING PEERS IN INSTRUCTIONAL DEVELOPMENT

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Using Peers: From Old Problems to New Promises

For the past decade university teaching has been under attack as being the "academic Achilles heel" (Whitfield, 1973), but while numerous models have been proposed for the upgrading of professional skills few have seriously considered the use of peers as a developmental resource. The reluctance to accept peer observation may well derive from the literature's unfavorable reports on the use of colleagues for evaluation and rating which were convened under the banner of accountability. If a lesson is to be learned from the literature, it is that peer observation should not include evaluation. Peers, however, can be an asset for the development of instruction once observation is liberated from the common context of evaluative rating and it is integrated into a developmental paradigm.

The Peer Problem

The discreditation of peer committees in higher education appears to be a result of the scattered negative reviews of colleague evaluation in which virtually every facet of the process, from terminology to reliability, is assailed. Who are "peers" in a department where there is no one having equal rank, experience, or a knowledge of the same esoteric field? If we accept Bergquist's (1975) definition of "peer" as any colleague who holds academic rank in the same discipline, then many small colleges have a substantial number of faculty members who have no peers. However, Sauter (1976) proposes a solution by referring to "intrafaculty" rather than to peers, but to adopt his definition seems to invite accusations of gimickry by cloaking an old concept in new lexicon. The acceptance of teaching improvement as the desired outcome of colleague observation presents enough commonality to warrant the use of "peers" as the keyword, regardless of rank or even disciplinary affiliation. Aside from the jargon, several more crucial problems are extant in the use of peers.

All but a few pieces of the sparce literature deal with colleagues as they are employed for evaluation, rating, or supervision, and these reports most frequently expose the failure or peers to form discriminating judgements concerning their fellow instructors. Zanowiak (in Carlson, 1975) points out that an evaluation is a

comparison with a standard and this raises the ageless query of "whose standard"? The problem does not appear to be in developing an acceptable standard since Pollock (1975), Pypcznski (1976), Schneider (1975), and Wood (1977), among others, have created systems, but rather in the close interpersonal relationships of colleagues within a department and the resulting biased data. Centra (1975) found low inter-item reliability for peer rating which he ascribes to high average scores. It is of no surprise, then, that Schneider (1975) has shown the peer evaluation of tenured faculty to be ineffective in improving teaching. Under the spectre of rating for tenure and/or promotion, faculty are unwilling to note observed weaknesses in the classroom performance of their compatriots.

While most reports show that a lack of discrimination renders peer review meaningless, low evaluations, when they occur, can be deleterious. In a study of the effects of poor rating on new faculty members, Carlson discovered that such reviews often result in rigidity or in a retreat to research as a defense mechanism. This leads him to conclude that peers are only effective in the evaluation of texts, course materials, examinations, and grading procedures. The evidence to date indicates that the use of peers in situations where there is a potential loss of the observee's security, whether financial or emotional, is at best meaningless and at its worst debasing.

Still other factors impinge upon the use of peers. Some of these are external, such as faculty time restrictions, while others are intrinsic, such as trust and privacy. A thorough observation cannot be accomplished in one visitation to a classroom; at least a half dozen samples are required to make a fair estimate of an instructor's performance. One major obstacle to meaningful reporting is the large amount of faculty time which must be invested in another individual's classroom. Within the requirements of advising, committee assignments, and class preparation faculty do not have ample time to devote to visitations. Entrance into a colleague's classroom, which has long been revered as hallowed territory in higher education, is noted by Alphonso (1977) as being the root of some suspicion and a low level of trust. College faculty, he observes, are private in respect to their teaching experiences. The lawyer's performance is observed in court and the doctor in the operating theater, but the professorial profession practices in peerless solitude.

Another Perspective

In vivid contrast to the problems inherent in the use of peers for evaluation there is strong support for a more meaningful use--improving instruction. There is a concensus of opinion among writers that if the purpose of peer usage is to be improvement then observation must be emancipated from threats such as rating, and, as Sauter adds, to become effective it must also be perceived as relevent and useful. Peer observation has been employed successfully in a study conducted by Wood and Neil (1976) where, after several experiences, faculty increased their commitment to the method as well as their ability to use observational techniques. McKeachie (1969) recommends that beginning college teachers observe their more experienced colleagues to benefit from their techniques and Alphonso adds that peers can go beyond skill development by promoting responsiblity and sharing. As Centra (1972) and McKeachie point out, observation can be a two-way opportunity to acquire new perspectives. The observer has the benefit of learning the use of skills possessed by the observee, thus increasing his repertoire of teaching techniques, and he can note behaviors which he would prefer not to model. Studying the observation forms can be a significant learning experience in itself. For some faculty, observation forms would represent their initial exposure to measurable criteria employed for the systematic recording of the instructional process. The reduction of the complexity of teacher behaviors into managable units can help allay the mystique surrounding the "successful" pedagogue. Curriculum can also be affected through the adoption of a loose definition of "peers". By abetting the crossing of departmental lines greater interdisciplinarity can evolve therefore reducing the fragmentation of knowledge. With a braoder perspective the potential exists for faculty to begin viewing themselves as educators rather than as disciplinarians with teaching duties. Most importantly, a new paradigm carries with it the removal of the potential derogatory erosion of self-esteem and replaces it with enlightened perspective.

Using Peers in Instructional Development

General Considerations

A comprehensive system of peer observation can assume several formats ranging from small groups of faculty from unrelated disciplines to larger groups of disciplinary related or unrelated individuals. There are a few general considerations which apply to any of these configurations. The most critical consideration is the amount of time which faculty must devote to the process of learning to use observation instruments, conferring with the observee prior to and after each observation, and during actual periods of observation. Such a demand on faculty time must be recognized by the institution on a par with major committee assignments. If attaining a higher quality of instruction is a worthwhile goal for an educational institution then awarding committee status to the program is readily justifiable. The amount of time and energy required of each participating instructor would be equivalent to a three credit graduate level course. A second consideration is the training in the procedures and instrumentation of observation.

Many college faculty members tend to perceive teaching as an innate gift which is possessed by some individuals and not by others. While all of the characteristics of "superior" teacher have never been identified, enough information has been gathered to enable the insturctor to analyze the teaching/learning situation and, at least, improve student performance as measured through testing. Competence in the meaning, use and interpretation of various observable criteria must be achieved before meaningful feedback can be presented to the observer. The objective of observation is the improvement of instruction but there can be no promises of creating the "super-teacher".

As the literature review emphasized, there can be no rating if the goal of an observation program is to improve instruction. Observation is the process of objectively recording overt behavior in the classroom situation--it does not seek to rank groups of faculty, nor does it strive to judge an instructor on a superior to inferior continuum. Observation is intended to serve as a mirror. Confidentiality between the observers and observees is paramount for the development of the open climate necessary for trust and sharing. Placing observers in the compromising position of evaluators inhibits the observee from discussing areas where there is a recognized need for improvement. The certainty of a loss in promotion or salary elicits unwanted defensive behavior rather than constructive reasoning. Whenever the evaluation of instruction is necessary procedures such as those described by French-Lasovik (1975) are recommended as a more judicious use of peers.

Professional college professors are highly skilled individuals who often react negatively to terms which they feel should be reserved for business and rats - such as "training"; they also show an adversion to terms which refer to places where diseases are cured - avoid "clinics". Faculty members are "continuing development" and "acquiring additional abilities". Titling your peer program requires caution in terminology.

Team Approach

The greatest potential for instructional improvement lies in the establishment of peer teams. Variability among institutions in their philosophy, faculty size, departmental structure, and committment to instructional development renders the configuration of observational teams to be a matter of institutional preference. Faculty can be encouraged to form their own groups in which case they will generally gravitate toward well established colleagues. While this approach may yield an initial higher level of trust there can also be some reluctance by participants to respond objctively with one another thus presenting a "halo effect". Peer teams can be assigned on the basis of school philosophy. For example, faculty can be aligned across disciplines if a greater degree of interdisciplinarity is an institutional goal. Departments can also be used as the vehicle for team selection or appointment where the number of faculty is large. The time of class meetings is a principle determinent of peer group composition since class schedules can not conflict within a team.

The rationale behind a team approach to systematic observation is derived from the necessity of multiple sessions. A small group of from three to four observers can, via their differing perceptions, note most teacher behaviors while attending a lesson. However, it generally takes repeated observations (six is recommended) to record most of the techniques employed by a professor. Differing concepts and instructional objectives require their own particular types of teaching strategies. Teaching psychological terminology, for example, requires a different pedagogical approach than teaching a process such as operant conditioning. All of the skills possessed by an instructor are rarely demonstrated in any one given lesson. Using the same individuals in a stable team encourages the development of trust and mutual responsibility. Through repeated observations by the same peers progress can be noted in the observees' skills.

A team effort, consisting of from three to four peers who observe each other from four to seven times during the span of one term offers the greatest liklihood that instruction will be improved. Whether these groups are elective or assigned, disciplinary or interdisciplinary, is a matter of institutional preference and each combination offers unique advantages.

Preparation

Other than modeling their own pedagogically ill-prepared professors, few college faculty members have experienced any formal education in the methodologies of instruction. Thus, instructing faculty in the terminology, philosophy, and methodologies of observing the teaching/learning process is crucial. A naive observer has few criteria to serve as a basis for recording behavior and may miss many important aspects of the observee's performance. When uninitiated group members are from within the same discipline they often tend to dwell on the "accuracy" of the subject matter rather than on the pedagogical techniques employed or the attentiveness of the learners. The development of a working knowledge of observational criteria is not excessively time consuming. Three to four hours of discussion is often ample preparation to begin formal in class observations.

Structurally, the orientation sessions require an introduction to the educational jargon used in observation. Terms such as organizer, questioning strategy, closure, and mediator must be explained and their importance to the learning process stressed. Observational check sheets and their systems of recording behavior must be practiced as well as explained. Taped or live mini-lessons are advantageous in that they afford an opportunity for participants to compare notes on the behaviors which were presented. The Instructional Developer can channel discussions revolving on the mini-lessons toward "discovering" alternative methods of presentation. As the instructors begin to observe their fellows and discuss their observations their ability to mirror instructional procedures becomes more accute. Whereas the instructional developer initially serves as a teacher in the peer process this role diminishes and a greater amount of time is devoted to consulting and measuring instructional effectiveness as requested by team members.

The Observation Cycle

Writings by well known specialists in the observation process, such as Withall and Wood, propose a three step procedure for maximizing understanding and feedback. An orientation, or pre-observation conference, provides a mutual framework for the session. During the pre-conference the observee provides the team with his objectives for the lesson they are to observe and the criteria for the observation are agreed upon. Initially, instructors tend to select criteria for observation with which they already feel confident. This should not be viewed as a failure of the system. The positive feedback that the instructor is likely to receive can build confidence and an openness to explore techniques with which the instructor has less confidence. The short pre-conference provides a basis of mutual understanding among group members and serves as an organizer for the post-conference and the observation.

Observation in the classroom should be unobtrusive. Students can respond differently with the presence of other instructors in the room. To minimize atypical reactions, the observer should not enter the class after it has begun and should place themselves around the perimeter of the room toward the rear. Team members should not be stationed next to each other for comparison of notes during the session. Placement toward the rear of the room makes fewer students aware of observer presence during the lesson and enables the peer to record the adequacy of visual image size of blackboard and overhead lettering. Seating near the perimeter of the room enhances the recording of student reaction data such as note taking. Observers must not be participatory in classroom discussions. Comments, even those which might help clarify a concept for the students, can be interpreted by the observee as a challenge toward his competence. Worse yet, this challenge occured before the teachers pupils. Observee interference is to be minimized if instructor behaviors are to be mirrored accurately for the post-conference.

The post-observation conference occurs soon after the classroom observation while the activities are still fresh in the minds of the participants. An observee analysis of the achievement of the lesson objectives and the behavioral criteria which were recorded should begin the conference. In this manner the observee can explain any differences which may have occured between the stated objectives and the actual lesson. After the observee remarks the team provides feedback based on their data sheets. Positive statements concerning a technique, explanation, etc. should be encouraged while the scarcity of other behaviors can be expressed as questions such as "do you think that a visual of electron flow would have helped the students?". Honesty is imperative but there is no place for sarcasm. Based on the discussion during the post-conference the observee can plan to increase some behaviors, such as questioning, or maintain the use of techniques which were successful. At this point the instructional designer can assist the team in explaining alternative techniques or develop new materials. Maintaining the recorded data until the completion of the observations will enable the observee to plot his progress on selected criteria and these plots can be used in the evaluation of the programs effectiveness.

Instrumentation and Evaluation

Two volumes have been published which detail instruments for observing teaching behaviors. These books by Simon and Boyer (1974) and Lake, Miles, and Earle (1973) are principally concerned with verbal behaviors. The Withall Socio-emotional Climate Index and the Flanders Interaction Analysis are examples of these tools. While the importance of such measures can not be denied there are other criteria for learning which are equally important but are not as readily found.

Melniks' (1974) work contains instruments which include teaching techniques and criteria that have been experimentally found to be important factors in student learning. Some modification and expansion of the materials found in Melniks' report will probably be necessary for the continuing progress of observation.

Some areas of teaching require the development of new instruments. There is no instrument available for noting the visualization of instruction, for example. An instrument for recording the congruence of Audio (verbal) and Visual displays is not yet available. Measures for the use of examples/non-examples, cuing technique, and the relationship of objective to strategies to testing are not readily available.

Evaluating the effectiveness of a peer observation program concerns both the learner and the observee. The ultimate goal of such a program is the improvement of student learning but there is some difficulty in estimating effectiveness in these terms. Since teacher behavior is changing along any number of dimensions it becomes difficult to attribute improved test scores to any single modification or any set of changes. In all probability the criterion measures (tests) will be changed from the form used the previous term and comparison becomes meaningless. If the instructor can compare some common test items between terms there can be an indication of improvement but in lieu of a well controled experimental design this remains only speculation. Better responses on essay items, while more subjective, can also be an indicator of improvement. An indicator is not an absolute and should not be reported as if it were a statistically significant result. The student can also indicate that affective inprovements were made by responses on course evaluation forms. Since motivation is largely affective and motivation is related to achievement it can be inferred that both the affective and cognitive domains have been modified when increased scores are found. This represents a possible course improvement but in terms of learning it is not measurable evidence. The reporting of change on student evaluations are descriptive rather than inferential.

Descriptive measures can also be used to assess the program where the instructor is concerned. Reports by participants on their perception of the effectiveness and appropriateness of the instruments provides critical feedback for the instructional developer. The comparison of the first and last observation records provide another avenue of evaluation. Because of the differing strategies which are required in each lesson this measure is relative for most criteria. Subjective opinion is also important since meaningfulness and the perception of self-improvement are critical for faculty participation. Annotations by the instructors which list new techniques they have learned and those behavior they have learned to avoid indicates that benefit has been derived from the system.

A Final Note

Peer observation infers that "traditional" instruction, which is instructor centered and paced, is the pervasive form of teaching While the relative effectiveness of this mode of presenting information can not be defended in terms of maximizing learning it remains dominant in most institutions of higher education. With the current financial crisis affecting the majority of institutions across the country it is unlikely that resources will be allocated toward more effective instructional modes. Self-paced carefully designed and monitored methods of instruction are far more effective for reaching individual learners but the lecture is considered to be more cost/effective. Since the lecture method is to remain for the forseeable future we must strive to increase its' effectiveness in spite of the major limitations inherent in this mode. Peer observation used in conjunction with instructional developers on an individual basis and student evaluations can play an important role in a cost/effective system of improving instruction.

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